

MEETING HIGHLIGHTS
Hanford Site Technology Coordination Group
Management Council

February 17, 1999
ETB – Columbia River Room
8:15 a.m. – 12:00 noon

PURPOSE

- To discuss the Groundwater/Vadose Zone S&T Roadmap and other technology planning activities

AGENDA

INTRODUCTIONS/ANNOUNCEMENTS

Linda Fassbender opened the meeting by handing out information in response to recent STCG Revitalization discussions. She stated the purpose of the meeting and reviewed the agenda.

UPDATES

- WGA Workshop Topics - Meetings have been held to determine what the purpose of the Hanford WGA Workshop should be. Suggestions for particular topics for the workshop should be given to Terry Walton.
- Subgroup Oral Reports - The Subgroup Leads gave reports on their Subgroups' activities. All Subgroups have started the S&T needs process. One new Mixed Waste need and two Tanks needs were endorsed at this meeting.
- ASTD – One D&D and two Subcon projects were funded. Deployment Plans were submitted and approved.

GROUNDWATER/VADOSE ZONE S&T ROADMAP – Terri Stewart, PNNL

The Groundwater/Vadose Zone S&T Roadmap links activities to projects and includes priorities and Technology Insertion Points. It will be updated annually. This is the first Complex roadmap being developed, and it will be used as a template for others.

CURRENT STATUS OF HANFORD TANKS INITIATIVE (HTI) – Jim Poppiti, DOE-RL

Funding is being cut in this program. The status of the four technologies under HTI is as follows:

- Cone Penetrometer – Funding has been budgeted in the Vadose Zone project to deploy this.
- Crawler Technology – The contracts will be put in place this year; funding may come next year.
- Retrieval Performance Evaluation – This work is essentially finished.
- LDUA – They have decided not to deploy it in AX-104. They are going to stop work and then decide what to do with it – either make it available for another site or figure out where to deploy it.

STATUS OF CANYON DISPOSITION INITIATIVE (CDI) – Kim Koegler, BHI

The purpose of CDI is to decide the ultimate disposition of the 200-Area Canyon facilities. U-Plant is the pilot project. CDI has support from EM-30, -40, -50, and -60, as well as the Hanford Site Management Board (SMB), the regulators, and the stakeholders. They will need continued support to succeed.

PRIORITIZATION CRITERIA FOR FOCUS AREA ACTIVITIES – Bob Allen, TFA

When the Tanks Focus Area receives the S&T needs from the sites, they decide how to respond technically. This year, they are required to tie their work packages to the PBSs in the Needs Management System. There is a timing issue that is currently being discussed.

FUTURE AGENDA ITEMS

MARCH AGENDA ITEMS:

- FDH Technology Deployment Success at WRAP (and Tour)
- Tracking Progress in Meeting S&T Needs
- Integration of Technology and Project Planning
- Continued Existence of the Hanford STCG – Would Projects fund STCG support?
- Review Definition of Success

FUTURE AGENDA ITEMS:

- Technologies Used in K-Basins
- Cost Savings Methodology

MEETING REVIEW/WRAP-UP

The next meeting will be held on March 17, 1999, from 8:15 to 12:00, in the EESB Snoqualmie Room.

ACTIONS

- Put together a Hanford-wide prioritization process, not specific to TFA.
- Rewrite Mixed Waste Need to emphasize the need for certification to fully deploy the technology.

HANFORD SITE TECHNOLOGY COORDINATION GROUP MANAGEMENT COUNCIL MEETING MINUTES

**February 17, 1999
ETB – Columbia River Room
8:15 a.m. – 12:00 noon**

INTRODUCTIONS/ANNOUNCEMENTS

Linda Fassbender opened the meeting and handed out the following information in response to recent STCG Revitalization discussions:

- Definition of Success Statement and Table
- Table of Actions that are being tracked
- New Meeting Evaluation form

Linda stated the purpose of the meeting and reviewed the agenda.

UPDATES

WGA Workshop Topics

Terry Walton (FDH) reported that a meeting was held in February to try to determine what the purpose of the Hanford WGA Workshop would be. There was a regional workshop held at Oak Ridge on barriers to technology deployment and linking principal investigators to end-users. We are trying to get the details of that workshop. Not much progress has been made on what the workshop at Hanford would look like. Roger Collis said that Pacific Rim Enterprise Center was asked by WGA to coordinate the Hanford workshop. He didn't want to put together the agenda without the help of all the players. The Oak Ridge workshop was disappointing, and we don't want a repeat of that. If the May date means that we can't put together a really quality event, we should push back on WGA and DOE-HQ to move the date. Suggestions for particular topics for the workshop should be given to Terry Walton.

Subgroup Oral Reports

Subcon – Fred Serier

Jim Wright and Tom Hicks from the Subsurface Contaminants Focus Area (SCFA) visited Hanford on February 1-5, and there was a Groundwater/Vadose Zone (GW/VZ) Expert Panel meeting on February 1-2. There was successful interaction with ER Projects on linking SCFA work packages with ER Project Baseline Summaries (PBSs).

Both of Subcon's ASTD projects are fully funded through project completion. Deployment plans were submitted to SCFA in mid-January. Interim funding was received for development of the deployment plans and to start work. The deployment plans were approved by HQ. The remaining funding is expected in the March Fin Plan.

The D&D Subgroup had a presentation on D&D of Mixed Oxide Fabrication Facilities. They also talked about work on glove box size reduction in conjunction with Mark Watson from BHI. He and Jim Goodenough laid out the long-term planning process that was used.

They received a call to provide a work plan for an ASTD proposal based on a DOE need to have a work platform employed in a hostile environment, suspended by a crane. The deployment plan was submitted by January 28. The document was approved, and the \$1.5M will be in the March Fin Plan.

The S&T needs process has begun. Shannon has information on the D&D Focus Area call next week. They had sent out a list of technologies that they believe will meet our current needs. They would like to get more information on our needs, and they will ask us to reference them in the appropriate ADS.

Mixed Waste – Ellen Dagan

The Mixed Waste Subgroup has also started the S&T needs process. They have a new need for endorsement: Non-Destructive Assay of CH TRUW to Meet WIPP Requirements for Burial Boxes - Certification of Deployed Boxed Waste Assay System. The equipment is funded; this proposal is to develop a procedure on how the Complex could use this technology.

It was suggested that if we have the equipment already, maybe it's not a technology need, but an administrative need. Bill Bonner commented that EM-50 is eager to have deployments. This is an opportunity to do that. Jay Augustenborg noted that "this is putting the cart before the horse". We solved our need, and now EM-50 is offering funding to get the deployment. We should put this on the list and help EM-50 get a deployment. This is what we call a pre-deployment activity. When you have a technology, you need the supporting information with it. Shannon Saget said that EM-50 is under a lot of pressure now to get their projects tied to needs and PBSs. It's a good idea to endorse it. The Site needs it. Roger Collis suggested that we put it forward for a vote. Basically, it's an administrative issue, but we need to put it in as an S&T need so EM-50 can fund it.

Julie Erickson suggested that the document be re-worded to say that in order to fully deploy the technology, this certification is needed. A vote was taken, and it passed unanimously.

Pete Knollmeyer asked if there was a formal process to get the Lab involved to help solve a Site problem. He said that it seems that we don't use our National Lab enough.

Gary Ballew said that he doesn't know if there is a formal process, but PNNL participates in the Subgroups. Wayne Martin indicated that the formal way is to provide a work order for PNNL staff to work on it. Bill Bonner added that Rick Brouns is PNNL's point of contact for EM work. He would appreciate your comments. The Lab would very much like to be involved in Site projects. Rick Brouns has been meeting with the projects to see how we can get more involved. Tom Page, Marilyn Quadrel and Terri Stewart are specific account managers. Craig Richins' new role is to work this issue. Debbie Trader said that one of the mechanisms they have done is to formalize incentives to do this, such as "Number of Hanford Solutions." PNNL gets credit for finding solutions to Hanford problems.

Tanks - Tom Frater

Tom discussed the following two S&T needs for endorsement:

- New Need -- Compositional Dependence of the Long-Term Performance of Glass as a Low-Activity Waste Form
- Revised Need -- Prediction of Solid Phase Formation in Static and Dynamic Hanford Tank Waste Solutions

Both needs were endorsed unanimously.

ASTD

This update was already covered in the Subgroup oral reports.

GROUNDWATER/VADOSE ZONE S&T ROADMAP

Terri Stewart (PNNL) presented the latest information on the Groundwater/Vadose Zone Integration Project's S&T Roadmap. The technical elements of the roadmap include: the Site inventory, the vadose zone, the groundwater, and the river.

The S&T Roadmap links S&T activities to projects; presents scope, schedule, outcome, and budget; and includes S&T priorities. There are five strategic areas:

- Integrate projects at the Site to ensure that we are taking the best knowledge available and trying to target a correct endstate.
- Use system assessment capability in conducting the work.
- Maintain a supporting S&T program.
- Conduct peer reviews of all our activities.

- Encourage public involvement.

They targeted a couple of decisions to focus on in the next few years:

- FY 2002 decision for 200-Area Remediation Assessment
- FY 2004 decision for SST retrieval

Future uses for the S&T Roadmap include:

- Basis for Planning
 - FY99 integration opportunities with projects
 - FY99 calls for proposals, basis for relevancy
- Basis for Assessing Progress
 - Revise as new needs are identified or old needs are resolved

The Roadmap will be updated annually, adding the risk assessment technical element and the remaining STCG needs in late FY 1999, and the monitoring technical element in FY 2000. This is the first Complex roadmap being developed, and it will be used as a template for others.

Terry Walton asked how this process was being carried back to the decision-makers. Terri said that there will be a mix of funding sources. Linda Bauer added that they have an integration team that has all the project people on it who can carry things back and forth between the Site projects and the GW/VZ Integration Project.

Terri explained the roadmap on the back wall and gave a capsule view of where they are today. Technology Insertion Points (TIPs) are showing up in the roadmap. They are working hard to bring the science aspect to the project.

The total funding for the project is \$7M in FY99. The whole program is funded at \$38.5M (which includes pump & treat, modeling, and everything the Site is spending on it).

Roger Collis asked how they are linked with the Office of River Protection (ORP). Linda Bauer said that ORP is in a state of flux right now, but they have people from TWRS dedicated full time to the GW/VZ Integration Project team. They will form the right linkages when ORP matures.

CURRENT STATUS OF HANFORD TANKS INITIATIVE (HTI)

Jim Poppiti (DOE-RL) talked about the current status of HTI. When TWRS was changed to the ORP during the past couple of months, some work elements were reorganized. Vadose Zone, HTI, and Facility Closure got moved into a new division. The acting Division Director is Maureen Hunemuller, and Jim Poppiti manages the Vadose Zone piece and the HTI piece.

There are four parts to HTI:

- Cone Penetrometer – TWRS/ORP is very impressed with this technology and would like to accelerate it into the Vadose Zone Project. They just concluded negotiations with Ecology, and

new TPA milestones for vadose zone characterization were added. Money has been budgeted in the Vadose Zone Project to deploy the Cone Penetrometer this year.

- Crawler Technology – There is no funding available to continue with the crawler technology at the moment. They will put the contracts in place this year, and then all they will need is the money to get the work started again. It is not being cancelled; they will be able to turn it back on immediately.
- Retrieval Performance Evaluation – This work is essentially finished.
- LDUA – They have completed the Operational Readiness Review (ORR), but don't have the budget to deploy the LDUA this year. They have decided to not deploy it in AX-104. There was no mission for LDUA after deployment, so they are going to stop work on LDUA and then decide what to do with it – either make it available for another site or figure out where to deploy it.

Questions/Comments:

Nancy Uziemblo feels that it was a shortsighted decision with respect to LDUA. The LDUA's mission at Hanford was to pick up samples out of AX-104. Jim said that they tried to balance the amount of money they have against the information needs. If the only mission for LDUA is getting samples out of that tank, it is not cost-effective.

Nancy said that the plan was to look at the potential of retrieving wastes from the tanks. The LDUA was being explored as a real effective tool to do it. We aren't going to have any tools in the toolbox to do this in the future. We need to look at options to improve efficiencies. There is more of a mission for TWRS/ORP than sampling.

Bob Rosselli asked if this is a one-year delay. Jim said they are still trying to decide. We could stop work this year and pick it up again when we get funding. Some people believe that the best thing to do is stop work, pack it up, and send it to another site. Bob agrees. He would like to do something to get this technology used somewhere.

Bob Rosselli said that HTI's purpose is to fund deployments for closure – arms and crawlers to clean out tanks. It has shifted a little from the original purpose to vadose zone technologies. Jim said that his purpose is to get a handle on the risk of the material you leave in the tank, so you can make a decision on whether or not to clean it out.

Rosselli said that the EM-50 Program's new strategy is to provide the user with what he wants, when he wants it. If we are hearing that we don't need or want the LDUA, we will put it to use somewhere else in the Complex. If ORP wants to explore the possibilities later, then we will consider that, but we are not going to sit idle.

Debbie Trader added that part of the concern is the delay in the retrieval contracts. She asked what the possibility for funding next year was, or if this is just a slow, drawn-out death. Jim said that SST retrieval is about a year behind schedule for C-106. They are still planning to do the demonstration in C-106 with the crawlers. LDUA will certainly not be used this fiscal year and maybe not next year, but he thinks we are going to use it.

Nancy said she still thinks there is a real gap with retrieval technologies, and this was an opportunity to learn about the LDUA technology.

Don Wodrich stated that he is very disappointed with not proceeding with HTI. The purpose of HTI was to develop retrieval technologies for SSTs. He thinks it's still the right initiative. In his mind, the toughest challenge for TWRS is how to get waste out of leaking SSTs. It is the one area that he feels we don't know how to do. Jim said that they are trying to come up with a better understanding of what's in the tanks and what risk that represents. Then they will come to stakeholders to communicate the risk and use that information to decide what kind of retrieval technologies to use. Don said we need to do both things – look at what technologies are available and the risk of leaving material in the tank.

Tom Brouns added that the LDUA is TWRS' arm to use if they want. There is certainly a mission for the LDUA in the Complex. If not used at Hanford, let's consider using it somewhere else.

STATUS OF CANYON DISPOSITION INITIATIVE (CDI)

Kim Koegler (BHI) provided a review of the Canyon Disposition Initiative at U-Plant. The purpose of CDI is to provide a strategic decision for permanent disposition of the 200-Area Canyon facilities. U-Plant is the pilot project. One of the options is to put a cap over the facility.

CDI has support from EM-30, -40, -50, and -60, as well as the Hanford Site Management Board (SMB), the regulators, and the stakeholders. They need continued support to succeed. It is a challenge to keep the various aspects of the initiative coordinated with all entities.

Status and Accomplishments:

- Crane upgrade
- Characterization technology activities
- Initial characterization of rail tunnel
- Structural sampling and analysis
- Opened process cell for examination
- Installed viewing area in Canyon
- Established Internet page (www.bhi-erc.com/canyon/canyon.htm)

Last year a technical working group was formed to develop the characterization requirements. This resulted in two deployments: the Andros Robot in the rail tunnel and 3-D gamma imaging technology.

While the Subsurface Contaminants Focus Area (SCFA) representatives were in town, the CDI project was presented to them, including some of the engineering needs appropriate to the Focus Area. The needs for this project are greater than the D&D Focus Area. One of the needs is for a high-profile surface barrier for entombment. Idaho and Savannah River, as well as other large facilities, may have opportunities to take advantage of what we learn on CDI.

FY 1999 scope includes

- Access three cells for planning (on hold until crane is upgraded)
- Crane maintenance and facility S&M

- Characterization – all work scope for characterization is in the Sampling and Analysis Plan out on the Web Page.

The work is regulated by CERCLA. If it were to become operations waste, then RCRA would be involved.

PRIORITIZATION CRITERIA FOR FOCUS AREA ACTIVITIES

Bob Allen, from the Tanks Focus Area (TFA), gave a presentation to help clarify questions about what happens to the STCG S&T needs statements every year. Once it receives the needs from the sites, TFA opens work packages to respond to the needs. They look at a need to see if others are similar and decide how they would respond to it technically. Then they send the responses back to the sites. All the other Focus Areas are doing the same thing. They are required to tie work packages with PBSs in the Needs Management System. There is a timing problem because the PBSs have to be identified before the work packages are planned to be done. This is an issue they are currently discussing.

Bob Rosselli said that EM-50 will not fund any technology that does not have a PBS tied to it indicating user support. Terry Walton asked if there was a dialog between the PBS manager and the Focus Area to tie things together. Bob feels that OST will go through the process and find that they will have to make some fallback plans because of the timing issue. There are a lot of people to get involved to get the needs into the PBSs, so it might not happen this year.

Bob Allen showed the proposed set of TFA prioritization criteria. He feels the criteria will remain the same, but the weighting may change somewhat. Once a work package arrives at a score, they will divide that into the dollars and arrive at a value score.

Debbie Trader asked if all sites were using the same criteria. Bob Allen anticipates that there will continue to be variations in the criteria used at each site.

Issues identified are:

- Proposed EM-50 work not reflected in PBSs will not be funded
- Timing - Ensure information is available to support the prioritization process.

TFA does not differentiate between a need (gap) and an opportunity (for improvement). They are looking at projects that might be more “strategic” in nature -- maybe not user-specific yet, but they will be in the future. The weighting scale is different for those.

Some keys to success are:

- Establishing relationships between sites and Focus Areas
- Dialog between sites and Focus Areas to ensure complete data are at hand for prioritization
- Entry of this data into appropriate databases

Pete Knollmeyer asked if there was a move afoot to make the Focus Areas work more consistently. Bob Rosselli said that they are trying to make TFA the model. This may or may not work, but there should be greater uniformity. EM-50 has put the philosophy and documents in place to make it more consistent.

Fred Serier asked if there was an appeal process to the decision-making. Ted Pietrok said that for the TFA, there will be a negotiation process.

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